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## NEW "ELECTRON PARADOX" again proves my charge field

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In <u>a new paper at ArXiv</u> by Guo et al., it is shown that electrons passing through a gap in a metal move much faster than expected. Even more, it is shown they travel faster when there are more of them, creating an apparent paradox. The announcement can be seen <u>at Scitechdaily.com</u>, where the new phenomenon is called a superballistic flow. There, MIT physics professor Leonid Levitov tells us the answer is that this is happening in a "quantum mechanical electron fluid". He tells it has been known for a century that common gases act the same way, and that the explanation is simple, basic physics. What is that basic physics, according to Levitov? It is that

In a passageway of a given size, if there are few gas molecules, they can travel unimpeded in straight lines. This means if they are moving at random, most of them will quickly hit the wall and bounce off, losing some of their energy to the wall in the process and thus slowing down every time they hit. But with a bigger batch of molecules, most of them will bump into other molecules more often than they will hit the walls. Collisions with other molecules are "lossless," since the total energy of the two particles that collide is preserved, and no overall slowdown occurs. "Molecules in a gas can achieve through 'cooperation' what they cannot accomplish individually," he says.

Sounds plausible if you pass it by at speed, but it is wrong. It is already known to be wrong regarding gasses by insiders—or should be—since gas densities aren't high enough to make the mechanics work. And if you take a closer look, the explanation falls apart with either gasses or electrons, since the explanation is circular. It assumes all collisions will maintain or increase a forward motion through the gap, when no such assumption can be made. In fact, it doesn't matter whether molecule collisions are lossless or not: that is just misdirection to keep you away from the real problem. The real problem is that motion of gasses is assumed to be random, in which case more collisions should create more molecule reversals. Also, neither molecules nor electrons are dimensionless. This is especially obvious with molecules, which have long been known to have real size. They cannot be treated as point particles, which means the diameter of each molecule must be included in the math, as a function of the size of the gap. Using poolball mechanics, molecule collisions should create slowdowns and vector reversals, which would not increase flow through the gap but decrease it. That's exactly why the **paradox** is created in the first place. Classical mechanics and math indicate the opposite of what we see, hence the paradox. Levitov claiming otherwise is not to the point.

But this is what they now do. Rather than address any question logically, these top physicists instead attempt to mesmerize you. They flip the truth and then try to sell it to you with an authoritative nod, telling you it is basic physics. But it isn't basic physics, or there would be no paradox. If it was simple and easy to explain using current fields, then these researchers would never have bothered publishing this paper, right?

They even admit that in the article. The reason this is being called "superballistic" is that the flows are exceeding the ballistic flows of Landauer's limit. That limit was calculated just as I said above, by treating either the gas or electrons as real particles whose collisions were treated as vectors. That math contradicts what Levitov just told us, since the "basic" physics and math cannot possibly cause an increase in speed through a gap.

This is precisely why Levitov dodges early on into a "quantum mechanical electron fluid". By calling it quantum mechanical, Levitov is telling us he intends to apply quantum math to the problem. And that just means that he needs the bag of tricks of QED, in which logic can be turned to illogic, and in which anything and its opposite can be proved with slippery math. As with other quantum "solutions", we expect to see Levitov using quasiparticles, tunneling, time reversal, or borrowing from the vacuum.

The right answer is hiding in the announcement, but apparently no one can see it. It is here:

In fact, the phenomenon actually increases as the temperature rises. In contrast to superconductivity, Levitov says, superballistic flow "is assisted by temperature, rather than hindered by it."

Given the current fields, that cannot be explained and is therefore a paradox. No amount of added math can explain it. No amount of added pettifoggery can explain it. *Only by changing the field definitions* can we explain it. In short, the charge field explains it because the gas or the electrons are not the only things in the field. The word "temperature" in the quote above reminds us of this, because in my theory temperature is different than in current theory. In current theory, temperature is a function of the gas or electron density. In my theory, temperature is a function of charge density. The gas or electrons are only responding to charge density, they are not creating it.

In other words, my theory reverses the cause and effect of current theory. In current theory, the larger particles are primary. In mainstream gas theory, they look first at the molecular gas. All the variables are assigned to the molecules. It is the molecules that have temperature, density, etc. They admit charge is present, but only as a secondary and mostly ignored characteristic. It is represented by little plusses and minuses on the ions, but is not considered in problems like this. But in my theory, charge is primary. It causes everything. The larger particles are just along for the ride, whether they are molecules or electrons. The primary gas in every problem is the charge gas, which is composed of photons. It is the stream that guides all larger particles. The temperature is the temperature of the photon gas. It can also be applied to the molecular or electron gas, since that secondary gas is carried by the primary photon gas. But as a matter of mechanics, it is the photon gas that is the first cause of everything.

You will say that only takes the problem back another step: it doesn't explain anything. But it does. It explains it because photons don't act like electrons or molecules. Being a million times smaller, they move through gaps differently than larger particles. We saw this in <u>solid state physics</u>, where we found it explained how energy moved through substances like metals. Photons can pass through gaps electrons can't, which meant we didn't need electrons tunneling, as just one example.

Here, the same basic thing applies, since an increase in temperature indicates an increase in charge density. Not only do we have more electrons, we have more photons. Since the photons carry the electrons along in their stream, more photons will naturally increase flow. It isn't a matter of constriction or non-constriction, you see, since the densities aren't high enough in any case to cause much photon constriction. It is a matter of photon or charge *flow*. An increase in temperature is an

increase in charge density, and since photons are always moving c, more photons increase flow. The more photons pushing a given electron, the faster it will go.

You still may not see the mechanism, so it may help to look at potentials through the gap. Even given higher temperatures and therefore higher photon densities, you may not see why flow through the gap would increase. Well, with larger particles it would increase less than for smaller particles. For the larger particles, the gap looks small, right? For the smaller particles like the photon, the gap doesn't look so small. To get a larger particle through the gap may take almost perfect aim. But to get a photon through the same gap, your aim has to be far less precise. If the gap is three electrons wide, for instance, only three electrons can go in abreast. But millions of photons could pass abreast. For this reason, the photon potential through the gap isn't the same as the electron potential through the gap. They are trying to solve this by calculating the electron potential through the gap, and then letting the electrons or molecules follow that charge potential.

The charge potential creates a flow through the gap, and the larger particles then follow it. *So the larger particles are not moving based on their own potentials.* They are following photon potentials. As I just showed you, the math of photon potentials is far different than the math of electron potentials. So if you try to solve these problems by calculating electron or molecule potentials, you will get the wrong answer.

I have shown before that the answer is different because by calculating photon potentials, we find that gasses are not random at all. And often, the more temperature the gas has, the *less* random it is. This seems like a paradox, but it isn't. It goes against what we are taught, but it is not a paradox. It is completely logical. This is because heat is normally added to a gas in a non-random fashion, and *heat and charge are the same thing*. For instance, if heat/charge is added using an E/M field, it will enter the gas in a directionalized manner. Even if it is not added by current, heat will most often be added to the gas from a certain direction. This will add structure to the gas, because every molecule in the gas is recyling charge. This also applies to electrons, which also recycle charge. Because all particles are recycling charge, they will respond to it, usually by aligning to its main source. Gasses are completely free to realign, and they will immediately do so. So any structure in the ambient charge field will immediately mirror in a molecular or electronic gas.

This also applies to the charge structure in a metal or any other substance. A metal has pre-existing charge paths, determined by its nuclear structure and alignment. Metals channel charge in long paths, which is why they are conductive and/or magnetic. These paths are charge potentials, and any new charge or heat applied must conform to those paths and potentials. And any electrons must conform to the charge paths, since electrons are carried along by photons. But when calculating potentials along these charge paths, we must follow the photons, not the electrons. If we try to calculate using the known size and charge of the electron, we will get the wrong answer. This is because the electron isn't moving based on its own potentials. It is being carried along by photons, and is therefore moving based on their field potentials, not its own.

To say it in yet another way, notice that in this experiment, we are inside a metal. The gap is inside a metal, and they admit that. Therefore, the potential through the gap can't be calculated simply by looking at ballistic math. It doesn't matter whether you include the diameter of the electron in the math or not, or whether you make each collision elastic or inelastic. It doesn't matter if you make each collision with the "wall" elastic or inelastic, either. This is because the potential through that gap isn't determined by any of those things. The potential through that gap is determined by how the metal is

channeling charge in that region, and what determines that is the nuclear structure of the metal, the temperature of the metal, and the way that heat is being added. Since all those questions are questions of charge and real photons, the only way to solve the problem is by looking at how charge is being channeled. Since the mainstream utterly ignores charge channeling, it cannot solve these problems no matter what math it brings to the table. If you start with the wrong field mechanics, no amount of math with help you. But if you start with the right field mechanics, you can get the right answer with very little math at all. This is probably why the mathematics departments are my bitter enemies. Once my physics is widely accepted, most of the current math will be returned to sender, or dumped into the oceans to fertilize the fishes.